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ASSESSMENT REPORT

ON A 2021 PORTABLE XRF GEOCHEMISTRY ANALYSIS PROGRAM OF THE NERLIP PROPERTY,

COLEMAN TOWNSHIP

LARDER LAKE MINING DIVISION, NORTHEASTERN ONTARIO

FOR

KUYA SILVER CORPORATION

Prepared by:

Shuda Zhou, M.Sc., P.Geo.

November 22nd, 2021

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List of Figures & Tables

1. Summary

This report was prepared and submitted by Shuda Zhou, a registered professional geoscientist and project geologist employed by Kuya Silver Corporation while working on mineral claims of the Silver Kings Joint Venture. The Silver Kings Joint Venture is an option agreement between Kuya Silver Corporation, the operator of the property, and First Cobalt Corporation, who holds the mineral claims through its subsidiary, Cobalt Industries of Canada Ltd.

The Nerlip Property is located in Coleman Township, 1km southeast of the town of O'Brien, Ontario (Figure 1). The Nerlip Property is prospective for silver, cobalt, nickel and copper.

In the fall of 2021, Kuya Silver Corp. personnel conducted seven (7) portable XRF (pXRF) analyses on two (2) outcrop exposures in the Nerlip Property and fifty-one (51) analyses on sixteen (16) samples taken from the Nerlip muck piles. Each outcrop visited and each sample selected from the Nerlip muck piles was recorded by handheld GPS, photographed and described. All spatial data contained in this report reflect a Universal Trans Mercator co-ordinate system using North American Datum 1983 Zone 17. Field co-ordinates were measured using a handheld Garmin GPS unit.

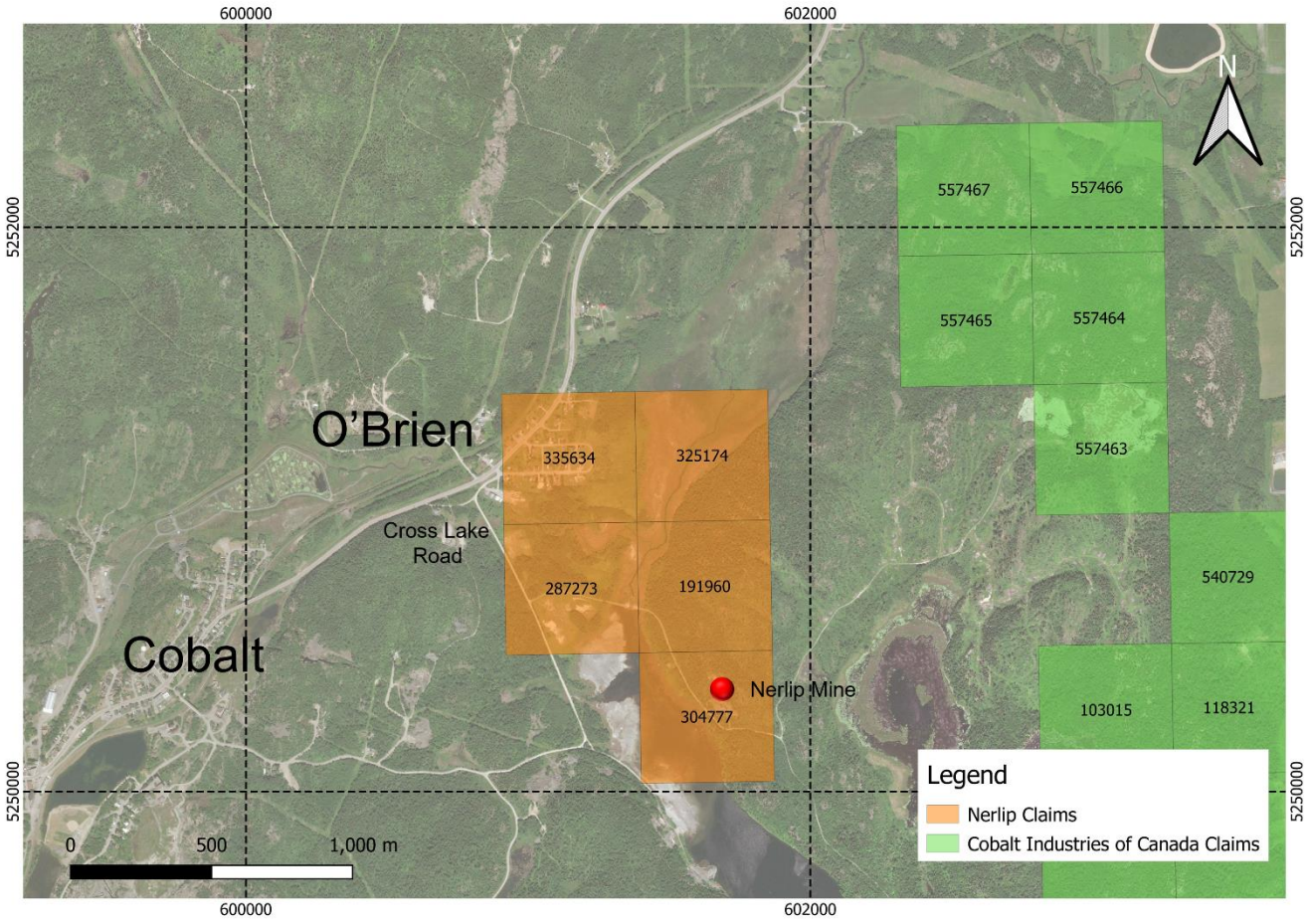
The work is helping to refine the geochemical signature of the Cobalt camp. pXRF geochemical results on unmineralized outcrops/rock samples help to understand the background values of Nipissing Diabase and Huronian Supergroup in the Cobalt mining camp. Anomalous pXRF results of silver and base metals from mineralized veins help to understand the geochemical halo of mineralized rocks and the potential dimensions of a geochemical halo.

2. Location, Access and Ownership

The Nerlip Property consists of five (5) cell mining claims and is located within Coleman Township, approximately 1 km southeast of the town of O'Brien within the Temiskaming Shores Municipality (Figure 1). The property lies within the Larder Lake Mining Division, within Provincial Grid 31M05J. The claims are held entirely (100%) by Cobalt Industries of Canada Inc. (a subsidiary of First Cobalt Corporation).

Access to the property is via Cross Lake Road from the town of O'Brien. Proceed down Cross Lake Road for 400m then turn left onto Deer Horn Mine Road. Proceed southeasterly for another 900m, an existing ATV trail leads to the Nerlip mine and muck piles.

Figure 1. Location of the Nerlip Property in Coleman Township, Larder Lake Mining Division (NAD 83 UTM Zone 17).



3. Property History and Previous Work

The exploration and production history of the Nerlip Property area is summarized below (Table 1) based on online Government of Ontario assessment files and historical Ontario Resident Geologist notes on file at the District Geologist's office in Kirkland Lake.

The earliest work on the property was conducting at an unknown date prior to 1932 by an unknown operator and included the sinking of the Webb shaft down to the 100 feet level with 150 feet of lateral workings at that level. From 1925-1926, Menago Mining Co. Ltd. extended the 1130 feet level of the Menango shaft from the Colonial property underneath Cross Lake and into the Nerlip property. In 1931, the Nerlip Main Shaft was sunk to a depth of 90 feet. Between 1932 and 1943, Nerlip Mines Ltd. deepened the Nerlip Main Shaft to 760 feet and developed levels at the 117 feet, 175 feet, 275 feet, 410 feet, 610 feet, and 745 feet levels. A vertical winze was sunk from the 745 feet level a further 145 feet with levels

developed at the 820 feet, 860 feet and 890 feet levels. Along these levels, 4,481 feet of drifting, 1,727 feet of cross cutting, and 367 feet of raising was completed. At this time, 20 underground diamond drill holes totaling 2,851 feet were also completed. From 1944-45, Augener Mines Ltd. conducted a further 108 feet of drifting, 55 feet of cross cutting, and 30 feet of raising as well as completing 4 underground diamond drill holes totaling 650 feet.

In 2016, Brixton Metals Corp. contracted K8aranda Geophysique Ltd to conduct a helicoptered airborne high-resolution quad magnetic survey across the 4 northernmost claim blocks of the Nerlip property (Assessment report #20000013799). In 2018, First Cobalt conducted prospecting, ground truthing, handheld XRF analysis, and minor sampling across the Nerlip Property (Assessment report #20000017134).

Table 1. Summary of previous assessment work filed.

Year	Assessment File Reference	Operator	Description
Pre 1932	NA	Unknown	Webb shaft sunk
1925-1926	NA	Menago Mining Co. Ltd.	1130 feet level of Menago shaft extended to Nerlip property
1931	NA	Unknown	Nerlip main shaft sunk
1932-1943	NA	Nerlip Mines Ltd.	Main shaft deepened, drifting, cross cutting, raising, underground diamond drilling
1944-1945	NA	Augener Mines Ltd.	Drifting, cross cutting, raising, underground diamond drilling
2016	20000013799	Brixton Metals Corp.	Airborne magnetic survey
2018	20000017134	First Cobalt Corp.	Prospecting, ground truthing, handheld XRF analysis, and minor sampling

4. Geological Setting

4.1 Regional Geology

The claim block is located within the geological domain known as the Cobalt Embayment, a circular

Proterozoic-age sedimentary basin. The basin is underlain by Archean volcanic, sedimentary, mafic intrusive, and granitoid units related to the southern extent of the Abitibi Subprovince. The Archean units are unconformably overlain by relatively flat-lying to openly-folded early Proterozoic Huronian Supergroup sedimentary rocks. In the Cobalt Embayment (Table 2), the Huronian Supergroup consists solely of the Cobalt Group (lacking the underlying Elliot Lake, Hough Lake and Quirke Lake groups), and it comprises the Gowganda Formation and overlying Lorrain Formation. The Gowganda Formation consists (from bottom to top) of the glaciogenic Coleman Member (conglomeratic diamictite, rhythmite, and sandstone), and the overlying Firstbrook Member (basinal mudstone, argillite, siltstone, and sandstone). The Lorrain Formation is unsubdivided sandstone, arenite and greywacke (Legun, 1986). The sedimentary rocks are intruded by diabase and gabbroic intrusions of the 2219-2209 Ma Nipissing sills and dykes (Corfu and Andrews, 1986; Noble and Lightfoot, 1992). Economic mineralization of the Cobalt area includes extensive historic mining of silver-bearing polymetallic (Ag-Ni-Co-Cu-Bi) carbonate and quartz veins, which occur in faults and fractures within all rock types, but notably proximal to Nipissing sills and the Archean/Proterozoic unconformity.

Table 2: Cobalt Embayment Stratigraphy

Cobalt Embayment Stratigraphy					
Phanerozoic		Recent Pleistocene		Fluvial and lacustrine deposits Glacial Sand, gravel, and varved clay	
			Unconformity		
	154-140	Jura-Cretaceous	Kimberlites, lamprophyres		
			Unconformity		
		Silurian	Thornloe Formation Wabi Formation	Dolomite, limestone Limestone, shale	
			Disconformity		
		Ordovician	Dawson Point Formation Farr Formation Bucke Formation Guigues Formation	Shale Limestone Shale Sandstone	
			Unconformity		
Proterozoic	1235-1238 Ma	Sudbury Dykes	Olivine and quartz diabase		
			Intrusive Contact		
	2220-2210Ma		Nipissing Diabase	gabbro, quartz gabbro, hornblende gabbro, quartz diabase, hypersthene diabase, varied-texture diabase, granophyric diabase	Co-Ag-As-Ni-Bi Mineralization
			Intrusive Contact		
		Huronian Supergroup	Cobalt Group Lorrain Formation Gowganda Formation Firstbrook Member Coleman Member	 Quartz arenite, arkose Laminated siltstone (grading upward from green to red), minor sandstone at upper part Polymictic conglomerate, diamictite, sandstone, laminated siltstone.	
			Unconformity		
Archean	~2454 Ma	Matachewan	Diabase, minor lamprophyre		
			Intrusive Contact		
		Algoman	Granite, granodiorite, syenite		
			Intrusive Contact		
	2667 ± 27	Haileyburian	Dykes and sills of mafic and ultramafic rocks; lamprophyre		
			Intrusive Contact		
		Timiskaming	Lithic and feldspathic arenites and wackes; conglomerate		
			Unconformity		
	2766 (?) - 2682(?) Ma	Volcanic Rocks	Minor interflow sediments (mainly black shale, chert); iron formation Felsic to intermediate volcanics (flows and pyroclastics), volcaniclastics Mafic to intermediate mafic flows and tuffs, volcaniclastics		Cu-Zn-Pb Mineralization

Compiled by: M. Hewton, 2017.

4.2 Property Geology

The Nerlip Property is mainly composed of Nipissing Diabase, with overlying Coleman Member sedimentary rocks exposed near the northwestern side of the property. The contact between diabase and the Coleman Member sedimentary rocks is inferred.

The property is located north-northeast of the Cross Lake fault. The Nerlip workings were in the Keewatin mafic volcanic and interflow sedimentary rocks below the lower contact with the Nipissing diabase on the NW flank of the Peterson diabase basin. A narrow, 12 feet thick wedge of Huronian

sedimentary rock is also reported to underlie the diabase in the northwestern section of the property. The diabase lower contact is exposed at the 745 feet level in the underground workings. The main vein is also exposed on the 745 feet level where it is 1250 feet long with the ore shoot extending for at least 90 feet below the 745 feet level. The grade was reported in 1943 to be 0.6 oz/ton silver, 4 lbs/ton cobalt, and 3.6 lbs/ton nickel. The main vein was reported as being closely associated with a west-northwest zone of faulting.

5. Work Program

5.1 Purpose and Work

The purpose of the 2021 portable XRF geochemistry analysis program was to help to refining the geochemical signature of both mineralized and unmineralized rocks in the Cobalt camp. On unmineralized outcrops, 3-4 analyses were scanned on different point location of the outcrop. At least three analyses were taken on each mineralized sample (one on mineralization, one immediately beside mineralization and one on unmineralized host rock).

pXRF geochemical results on unmineralized outcrops/rock samples help to understand the background values of Nipissing Diabase and Huronian Supergroup in the Cobalt mining camp. Anomalous pXRF results of silver and base metals from mineralized veins/rocks help to understand the geochemical halo of mineralized rocks and how wide is the geochemical halo. The understanding of how geochemistry perform near mineralization will help with identifying geochemical anomalies in new target areas in the Cobalt camp.

The fieldwork was conducted by Kuya Silver Corp. personnel Shuda Zhou and Ryan Burrows from Oct. 12th to Oct. 13th, 2021.

On Oct. 12th, Shuda Zhou and Ryan Burrows visited the site for ground truthing, mapping and selecting samples. 2 outcrops were mapped in the Nerlip property and 16 rock samples were selected from the Nerlip muck pile for pXRF analysis. The rock samples selected for pXRF analysis are mineralized (primarily with erythrite, a hydrated cobalt arsenide mineral), with surrounding wall-rock. 2 outcrops and 4 rock samples selected were scanned by pXRF. The location of the Nerlip shaft was also located (NAD 83 Zone 17: 601699E 5250330N).

On Oct. 13th, Shuda Zhou and Ryan Burrows returned to scan the remaining 12 selected rocks samples with pXRF. A total of 38 analyses were done on Oct. 13th. All rock samples were located by handheld GPS,

photographed, described, and scanned with the pXRF (see sample description and XRF results in Appendix D).

Table 3: Tenure List for the Nerlip Property

Tenure ID	Township/Area	Tenure Type	Anniversary Date
191960	Coleman	Boundary Cell Mining Claim	2021-12-15
287273	Coleman	Single Cell Mining Claim	2021-12-15
304777	Coleman	Boundary Cell Mining Claim	2021-12-15
325174	Coleman	Boundary Cell Mining Claim	2021-12-15
335634	Coleman	Boundary Cell Mining Claim	2021-12-15

5.2 XRF analysis and equipment

The portable XRF (pXRF) analyses were conducted using a Thermo Scientific Niton XL3t-950 handheld portable XRF using the voltage of 50 kV. Scans were done on fresh bedrock outcrops, with each analysis scanned for sixty (60) seconds. Calibration and quality control was monitored by scanning Quality Assurance/Quality Control standard RCRApp every 20 analyses and the pXRF unit was professionally serviced and calibrated in 2021.

pXRF analyses were conducted on each outcrop and rock sample documented with results tabulated in Appendix C.

Figure 2: Field image of personnel conducting pXRF analysis

6. Interpretations and Conclusions

The handheld XRF results at the two outcrops and most of the unmineralized samples are within the range of unmineralized Nipissing Diabase and Huronian Supergroup based on previously-scanned XRF analyses database (Appendix E) that have been collected in the Cobalt region. The XRF analyses on mineralized samples show highly anomalous values in Co, Cu, Ni and As. However, the geochemical halo of the mineralization seems relatively small as it dies out quickly after moving away from the mineralization.

7. Recommendations

Additional pXRF analyses are recommended to be done on Silver Kings Joint Venture and surrounding areas with attention paying to pathfinder elements such as Co, Cu, Ni and As. Soil sampling grids may be useful in identifying further silver-cobalt mineralization as the geochemical halo of mineralized veins is small.

8. Personnel

Shuda Zhou	Project Geologist, Kuya Silver Corp.
Ryan Burrows	Geo-technician, Kuya Silver Corp.

9. References

Ayer, J.A. and Chartrand, J.E. 2011. Geological compilation of the Abitibi greenstone belt; Ontario Geological Survey, Miscellaneous Release-Data 282.

Cunningham, P. 1959. DD RPT 14 COLEMAN TWP.

Knight, C.W. 1924. Thirty-First Annual Report of the Ontario Department of Mines, being Vol. XXXI, Part II, 1992. Geology of the Mine Workings of Cobalt and South Lorrain Silver Areas. ARV31-02.

Ploeger, J, 2016. 2205730 ONTARIO INC. Q2282 – Coleman Property. Magnetometer and VLF EM Surveys.

Sergiades, A. O. 1968. Silver Cobalt Calcite Vein Deposits of Ontario; Mineral Resources Circular No. 10, Ontario Department of Mines.

Thomson, R. 1961. Preliminary Report on Part of Coleman Township Concession VI, Lots 1 to 6, District of Timiskaming; Ontario Department of Mines PR1961-03.

Certificate of Qualified Person

I, Shuda Zhou, M.Sc. P. Geo., residing in Toronto, Ontario, Canada, do hereby certify that:

1) I have personally prepared the Technical Report and approve of its contents.

2) I am a Project Geologist for Kuya Silver Corp. based in Toronto, Ontario at Suite 203, 150 King Street West M5J 1J9.

3) I graduated with an Honours B.Sc. (Geology) from China University of Geoscience in 2012. I obtained my M.Sc (Earth Sciences) at the University of Windsor, Windsor, Ontario in 2015.

4) I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (APGO #3367).

5) I have worked as a geologist for 6 years since my graduation from university, on a wide variety of gold, base metal, lithium and silver exploration properties, including project management.

6) As of the effective date of the Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all the scientific and technical information that is required to be disclosed to ensure the Technical Report is not misleading.

Toronto, Ontario, Canada

(Signed and Sealed) “Shuda Zhou”

Shuda Zhou, M.Sc., P. Geo.

Project Geologist

Kuya Silver Corp.

November 22nd, 2021

APPENDIX A - Statement of work and costs

Work performed in this report was conducted by Shuda Zhou, M.Sc., P.Geo (Project geologist), Ben Mark, B.Sc., (student geologist) and Ryan Burrows (geo-technician). Attached are the statement of work and costs:

Table 4: Statement of work

Work (days)	Date	Work Type	Personnel Working
1	October 12th, 2021	Sampling, XRF	Project geologist * 1, Geo-technician *1
0.5	October 13th, 2021	XRF	Project geologist * 0.5, Geo-technician *0.5
1	October 17th, 2021	Report preparation and writing	Project geologist * 1
1	November 2rd, 2021	Report preparation and writing	Project geologist * 1, Student geologist *1
1	November 22rd, 2021	Report preparation and writing	Project geologist * 1

Table 5. Statement of costs

Receipt Number	Item	Number of days	Daily cost	Monthly cost	Total cost	Comment
1	October 2021 Truck rental receipt	2.5	$ 61.16	$ 1,895.82	$ 152.89	
2	November 2021 Truck Rental Receipt	2	$ 100.00	$ 3,000.00	$ 200.00	
3, 4	October 2021 Harbourview Suites rental	2.5	$ 77.42	$ 2,400.00	$ 193.55	
5	November 2021 Harbourview Suites rental	2	$ 80.00	$ 2,400.00	$ 160.00	
6	Project geologist salary	4.5	$ 550.00		$2,475.00	No receipt
7	Student geologist salary	1	$ 350.00		$ 350.00	No receipt
8	Geo-technician salary	1.5	$ 250.00		$ 375.00	No receipt
9	Per Diem	5.5	$ 30.00		$ 165.00	No receipt
				Total cost	$4,071.44	

APPENDIX B – Outcrop and Sample Location

Table 6: Outcrop and Sample Location (Coordinates in NAD83 UTM Zone 17N)

Mapper	Date	Station	Easting	Northing	Elevation	Primary Rock Unit	Comment
SZ/RB	Oct.12th, 2021	NER-01	601683	5250416	293	Nipissing Diabase	Outcrop
SZ/RB	Oct.12th, 2021	NER-02	601681	5250345	279	Nipissing Diabase	Outcrop
SZ/RB	Oct.12th, 2021	NER-03	601691	5250295	269	Nipissing Diabase	Rock sample
SZ/RB	Oct.12th, 2021	NER-04	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.12th, 2021	NER-05	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.12th, 2021	NER-06	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-07	601691	5250295	269	Nipissing Diabase	Rock sample
SZ/RB	Oct.13th, 2021	NER-08	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-09	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-10	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-11	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-12	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-13	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-14	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-15	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-16	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-17	601691	5250295	269	Sandstone	Rock sample
SZ/RB	Oct.13th, 2021	NER-18	601691	5250295	269	Sandstone	Rock sample

SZ - Shuda Zhou, RB - Ryan Burrows

APPENDIX C - Geochemistry

Table 7: XRF results for mapped outcrops *and rock samples*

Analysis ID	Rock type	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca	Comment
RCRApp Standard		ppm	362	155	479	564	58	83	506	84	33300	Standard
NER-01-1	DB	ppm	8	183	33	442	92	50	68	49	57200	On outcrop
NER-01-2	DB	ppm	9	210	33	713	74	114	10	71	60300	On outcrop
NER-01-3	DB	ppm	12	210	9	704	69	84	22	65	72200	On outcrop
NER-02-1	DB	ppm	0	233	94	565	59	111	26	155	46500	On outcrop
NER-02-2	DB	ppm	0	318	125	732	39	58	21	119	5537	On outcrop
NER-02-3	DB	ppm	8	346	78	186	65	134	46	181	58700	On outcrop
NER-02-4	DB	ppm	15	260	385	0	84	58	100	345	7700	On outcrop
NER-03-1	DB	ppm	58	0	34	0	84	87	0	11	259200	On pinkish carbonate vein
NER-03-2	DB	ppm	14	0	19	0	94	103	0	49	3066	Right beside carbonate vein
NER-03-3	DB	ppm	0	-154	16	271	209	184	0	39	14000	5cm beside carbonate vein
NER-04-1	HSG	ppm	217	492	521	0	200400	76	0	0	41900	Malachite in carbonate vein
NER-04-2	HSG	ppm	42	247	259	0	44200	0	17	156	65600	Some chalcopyrite in carbonate vein
NER-04-3	HSG	ppm	0	0	249	0	2027	151	132	140	8472	Right beside carbonate vein
NER-05-1	HSG	ppm	242	4659	1475	0	2017	416	1575	2410	12100	Mineralization in carbonate vein
NER-05-2	HSG	ppm	0	806	84	401	29	291	11	64	21000	Right beside carbonate vein
NER-05-3	HSG	ppm	0	1876	311	584	39	689	7	120	17800	10cm beside carbonate vein
NER-05-4	HSG	ppm	0	167	146	92	12	194	0	95	13600	10cm beside carbonate vein
NER-06-1	HSG	ppm	223	94100	170600	0	0	109400	0	136	8447	Cobaltite in carbonate vein
NER-06-2	HSG	ppm	-2	14500	18300	503	0	10400	23	205	7321	Right beside carbonate vein
NER-06-3	HSG	ppm	0	2433	1049	125	20	1404	20	124	4732	5cm beside carbonate vein
RCRApp Standard		ppm	393	177	481	529	56	70	495	79	33100	Standard

NER-06-4	HSG	ppm	0	3374	917	731	29	945	21	125	6474	10cm beside carbonate vein
NER-07-1	DB	ppm	32	0	10	236	44	58	-6	23	238900	Mineralization in carbonate vein
NER-07-2	DB	ppm	31	293	5	288	48	74	0	17	193800	Mineralization in carbonate vein
NER-07-3	DB	ppm	52	0	17	0	29	320	0	75	15300	3cm beside carbonate vein
NER-07-4	DB	ppm	43	692	14	0	30	83	0	46	217400	3cm beside carbonate vein
NER-08-1	HSG	ppm	0	14000	19900	593	-196	23200	10	137	7068	Cobaltite in sandstone
NER-08-2	HSG	ppm	0	862	490	292	50	857	16	98	5955	5cm from mineralization
NER-08-3	HSG	ppm	0	25600	3562	737	135	3145	19	130	6767	Cobaltite grains in sandstone
NER-08-4	HSG	ppm	0	716	221	99	38	373	65	147	3609	10cm from mineralization
NER-09-1	HSG	ppm	13	0	57	0	124	119	0	102	132700	Cobaltite in carbonate vein
NER-09-2	HSG	ppm	23	24	43	822	1207	38	0	16	353200	Chalcopyrite grains in carbonate vein
NER-09-3	HSG	ppm	35	-83	49	243	31	241	-10	66	241500	Carbonate vein in sandstone
NER-10-1	HSG	ppm	295	431	2142	0	23700	289	1415	220100	2430	Mineralization in carbonate vein
NER-10-2	HSG	ppm	0	49	19	168	16	98	84	336	13200	Right beside carbonate vein
NER-10-3	HSG	ppm	26	0	28	0	77	74	61	782	21600	5cm beside carbonate vein
NER-11-1	HSG	ppm	57	2510	1202	0	134500	288	13	147	13400	Malachite in carbonate vein
NER-11-2	HSG	ppm	69	87000	66400	0	2660	17800	0	42	15200	Cobaltite in carbonate vein
NER-11-3	HSG	ppm	12	45900	15800	473	2933	7117	-5	68	44600	Gossan immediately beside vein
RCRApp Standard		ppm	360	86	440	672	49	84	540	81	33900	Standard
NER-12-1	HSG	ppm	0	27500	25400	491	0	10700	20	152	3696	Cobaltite on rock surface
NER-12-2	HSG	ppm	0	1342	221	173	55	932	10	77	23600	5cm from mineralization
NER-13-1	HSG	ppm	8	15900	5149	1355	80	3455	13	83	157800	Cobaltite in carbonate vein
NER-13-2	HSG	ppm	45	5151	2440	0	35	1674	0	344	1748	Right beside carbonate vein
NER-14-1	HSG	ppm	130	0	2588	0	12800	822	179	263	3877	Mineralization in carbonate vein
NER-14-2	HSG	ppm	13	-249	85	1041	1016	159	1	189	23800	Gossan immediately beside vein
NER-14-3	HSG	ppm	9	-98	81	547	517	122	27	216	29600	5cm beside carbonate vein
NER-15-1	HSG	ppm	80	51400	73600	0	0	42300	104	172	16000	Cobaltite in carbonate vein
NER-15-2	HSG	ppm	0	3232	2783	317	36	1210	10	142	103700	Potassium alteration right beside vein

NER-15-3	HSG	ppm	8	2422	1438	1048	87	838	20	116	27600	Potassium alteration 10cm from vein
NER-16-1	HSG	ppm	256	8447	12000	0	84200	2587	2364	1271	4143	Malachite grains on fault surface
NER-16-2	HSG	ppm	121	931	1580	0	50800	659	157	486	121300	On barren fault plane
NER-16-3	HSG	ppm	0	0	53	191	558	86	44	46	756	10cm away from fault plane
NER-16-4	HSG	ppm	14	88	29	179	82	33	16	84	369100	On unmineralized carbonate vein
NER-17-1	HSG	ppm	45	41300	41000	0	0	27800	98	333	9346	Cobaltite on rock surface
NER-17-2	HSG	ppm	12	2312	1296	0	232	1691	22	491	23800	Right beside carbonate vein
NER-17-3	HSG	ppm	23	1502	292	1688	131	653	59	396	16300	5cm beside mineralization
NER-18-1	HSG	ppm	13	0	789	8847	509	255	581	1633	5791	Rusty spot on rock surface
NER-18-2	HSG	ppm	0	134	16	33	37	72	75	70	16200	Unmineralized sandstone
NER-18-3	HSG	ppm	0	80	16	123	29	101	8	112	2901	Unmineralized sandstone

HSG - Huronian Supergroup sedimentary rocks; DB - Nipissing Diabase and RCRApp – Quality Control standard made by Thermo Scientific.

APPENDIX D - Description of Outcrops and Rock Samples

NER-01

Station	Date	Easting	Northing	Elevation	Rock unit
NER-01	12-OCT-2021	601683	5250416	293	Nipissing Diabase

Coordinates in NAD83 UTM Zone 17N

Station primarily consists of Nipissing Diabase. The diabase is dark grey, equigranular and medium grained. No evident structure and mineralization were noticed. Composition primarily composed of plagioclase, amphibole and biotite with minor quartz.

The rock was scanned by portable XRF three times at three distinctly different point locations. There were no anomalous silver, cobalt or base metal values detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-01-1	Diabase	ppm	8	183	33	442	92	50	68	49	57200
NER-01-2	Diabase	ppm	9	210	33	713	74	114	10	71	60300
NER-01-3	Diabase	ppm	12	210	9	704	69	84	22	65	72200

NER-02

Station	Date	Easting	Northing	Elevation	Rock unit
NER-02	12-OCT-2021	601681	5250345	279	Nipissing Diabase

Coordinates in NAD83 UTM Zone 17N

Station primarily consists of Nipissing Diabase. The diabase is dark grey, equigranular and medium grained. No evident mineralization was noticed. There are a few cross-cutting fractures with 1-3 cm wide carbonate vein inside. Potassium alteration was noted on the outcrop. Composition primarily composed of plagioclase, amphibole and biotite with minor quartz.

The rock was scanned by portable XRF four times at four distinctly different point locations. There were no anomalous silver, cobalt or base metal values detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-02-1	Diabase	ppm	0	233	94	565	59	111	26	155	46500
NER-02-2	Diabase	ppm	0	318	125	732	39	58	21	119	5537
NER-02-3	Diabase	ppm	8	346	78	186	65	134	46	181	58700
NER-02-4	Diabase	ppm	15	260	385	0	84	58	100	345	7700

NER-03

Station	Date	Easting	Northing	Elevation	Rock unit
NER-03	12-OCT-2021	601691	5250295	269	Nipissing Diabase

Coordinates in NAD83 UTM Zone 17N

The rock sample primarily consists of Nipissing Diabase. The diabase is dark grey, equigranular and medium grained. A 2cm calcite vein is within the sample with pinkish coloured erythrite in the vein.

The rock was scanned by portable XRF three times at three distinctly different point locations. Minor anomalous silver was detected in the first analysis.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-03-1	Diabase	ppm	58	0	34	0	84	87	0	11	259200
NER-03-2	Diabase	ppm	14	0	19	0	94	103	0	49	3066
NER-03-3	Diabase	ppm	0	-154	16	271	209	184	0	39	14000

NER-04

Station	Date	Easting	Northing	Elevation	Rock unit
NER-04	12-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

The rock sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is fine grained, greenish gray on fresh surface. A 3cm quartz-carbonate vein is in a fracture with malachite, chalcopyrite and pyrite in it.

The rock was scanned by portable XRF three times at three distinctly different point locations. Decent anomalous silver and copper was detected in the first analysis.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-04-1	HSG	ppm	217	492	521	0	200400	76	0	0	41900
NER-04-2	HSG	ppm	42	247	259	0	44200	0	17	156	65600
NER-04-3	HSG	ppm	0	0	249	0	2027	151	132	140	8472

NER-05

Station	Date	Easting	Northing	Elevation	Rock unit
NER-05	12-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

The rock sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is fine grained, greenish gray on fresh surface. A 3cm carbonate vein is in a fracture with sphalerite, chalcopyrite and pyrite in it.

The rock was scanned by portable XRF four times at four distinctly different point locations. Decent anomalous silver, copper and cobalt was detected in the first analysis.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-05-1	HSG	ppm	242	4659	1475	0	2017	416	1575	2410	12100
NER-05-2	HSG	ppm	0	806	84	401	29	291	11	64	21000
NER-05-3	HSG	ppm	0	1876	311	584	39	689	7	120	17800
NER-05-4	HSG	ppm	0	167	146	92	12	194	0	95	13600

NER-06

Station	Date	Easting	Northing	Elevation	Rock unit
NER-06	12-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

The rock sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is fine grained, greenish gray on fresh surface. Some cross-cutting fractures and carbonate veins are identified within the sandstone with pinkish coloured erythrite on the surface.

The rock was scanned by portable XRF four times at four distinctly different point locations. Decent anomalous silver, copper and arsenic was detected in the first analysis.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-06-1	HSG	ppm	223	94100	170600	0	0	109400	0	136	8447
NER-06-2	HSG	ppm	-2	14500	18300	503	0	10400	23	205	7321
NER-06-3	HSG	ppm	0	2433	1049	125	20	1404	20	124	4732
NER-06-4	HSG	ppm	0	3374	917	731	29	945	21	125	6474

NER-07

Station	Date	Easting	Northing	Elevation	Rock unit
NER-07	13-OCT-2021	601691	5250295	269	Nipissing Diabase

Coordinates in NAD83 UTM Zone 17N

The rock sample primarily consists of Nipissing Diabase. The diabase is dark grey, equigranular and medium grained. Composition primarily composed of plagioclase, amphibole and biotite with minor quartz. A 5cm carbonate vein in the middle of the rock sample was identified with some dark fine grained mineralization that were unable to identify due to weathering. No erythrite was seen on the surface.

The rock was scanned by portable XRF four times at four distinctly different point locations. There were minor anomalous silver, cobalt or base metal values detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-07-1	Diabase	ppm	32	0	10	236	44	58	-6	23	238900
NER-07-2	Diabase	ppm	31	293	5	288	48	74	0	17	193800
NER-07-3	Diabase	ppm	52	0	17	0	29	320	0	75	15300
NER-07-4	Diabase	ppm	43	692	14	0	30	83	0	46	217400

NER-08

Station	Date	Easting	Northing	Elevation	Rock unit
NER-08	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

The rock sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is fine grained, greenish gray on fresh surface. Some pinkish coloured erythrite are on weathered surface.

The rock was scanned by portable XRF four times at four distinctly different point locations. Decent anomalous cobalt, arsenic and nickel were detected.

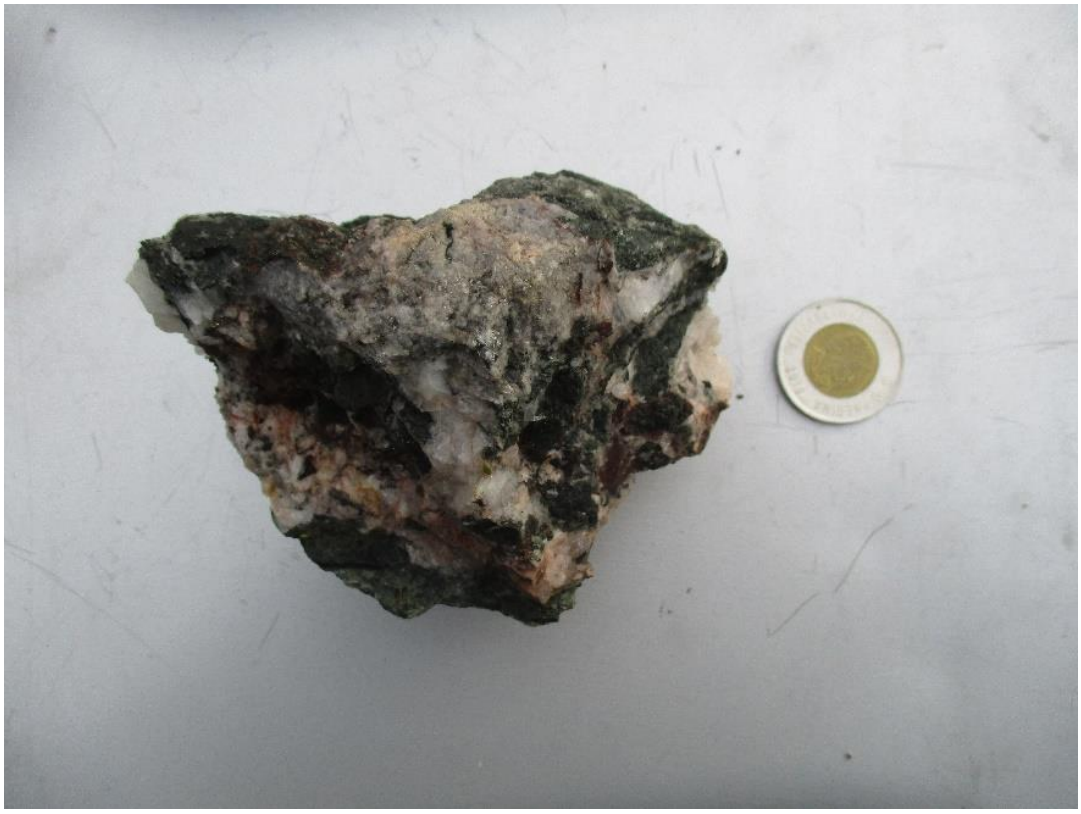
Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-08-1	HSG	ppm	0	14000	19900	593	-196	23200	10	137	7068
NER-08-2	HSG	ppm	0	862	490	292	50	857	16	98	5955
NER-08-3	HSG	ppm	0	25600	3562	737	135	3145	19	130	6767
NER-08-4	HSG	ppm	0	716	221	99	38	373	65	147	3609

NER-09

Station	Date	Easting	Northing	Elevation	Rock unit
NER-09	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of carbonate vein with some sedimentary rocks of the Huronian Supergroup (sandstone?). Chalcopyrite with possible erythrite were seen on the surface of the sample. No visible alteration was seen.



The rock was scanned by portable XRF three times at three distinctly different point locations. Minor anomalous copper value was detected from the second analysis.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-09-1	HSG	ppm	13	0	57	0	124	119	0	102	132700
NER-09-2	HSG	ppm	23	24	43	822	1207	38	0	16	353200
NER-09-3	HSG	ppm	35	-83	49	243	31	241	-10	66	241500

NER-10

Station	Date	Easting	Northing	Elevation	Rock unit
NER-10	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is greenish gray in fresh surface, fine grained. A 2cm carbonate vein is in a fracture with sphalerite, chalcopyrite and pyrite in it.

The rock was scanned by portable XRF three times at three distinctly different point locations. There were anomalous silver, cobalt, copper and arsenic values detected from the first analysis.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-10-1	HSG	ppm	295	431	2142	0	23700	289	1415	220100	2430
NER-10-2	HSG	ppm	0	49	19	168	16	98	84	336	13200
NER-10-3	HSG	ppm	26	0	28	0	77	74	61	782	21600

NER-11

Station	Date	Easting	Northing	Elevation	Rock unit
NER-11	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is greenish gray in fresh surface, fine grained. A 2cm carbonate vein is in a fracture with malachite, erythrite and gossan in it.

The rock was scanned by portable XRF three times at three distinctly different point locations. There were anomalous silver, cobalt, copper and nickel values detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-11-1	HSG	ppm	57	2510	1202	0	134500	288	13	147	13400
NER-11-2	HSG	ppm	69	87000	66400	0	2660	17800	0	42	15200
NER-11-3	HSG	ppm	12	45900	15800	473	2933	7117	-5	68	44600

NER-12

Station	Date	Easting	Northing	Elevation	Rock unit
NER-12	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is greenish gray in fresh surface, fine grained. Some pinkish erythrite were seen on the surface of the sample.

The rock was scanned by portable XRF two times at two distinctly different point locations. There were anomalous cobalt, arsenic and nickel values detected from the first analysis.

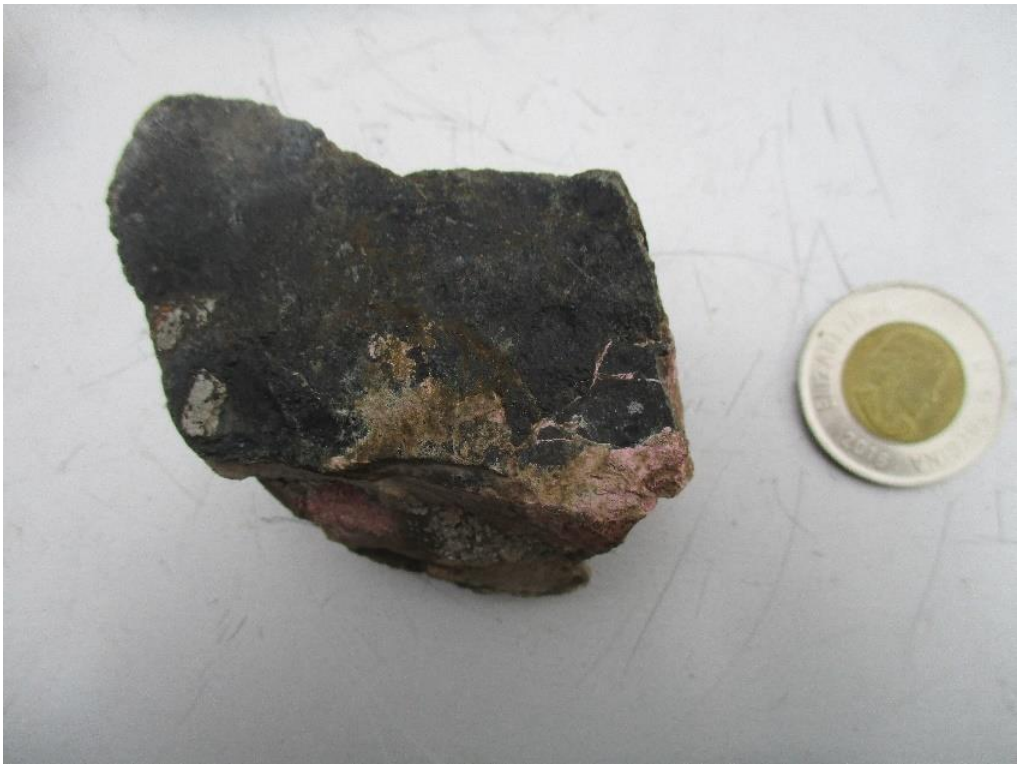
Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-12-1	HSG	ppm	0	27500	25400	491	0	10700	20	152	3696
NER-12-2	HSG	ppm	0	1342	221	173	55	932	10	77	23600

NER-13

Station	Date	Easting	Northing	Elevation	Rock unit
NER-13	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is greenish gray in fresh surface, fine grained. A 2cm carbonate vein is in a fracture with pinkish erythrite in it.



The rock was scanned by portable XRF two times at two distinctly different point locations. There were anomalous cobalt, arsenic and nickel values detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-13-1	HSG	ppm	8	15900	5149	1355	80	3455	13	83	157800
NER-13-2	HSG	ppm	45	5151	2440	0	35	1674	0	344	1748

NER-14

Station	Date	Easting	Northing	Elevation	Rock unit
NER-14	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is greenish gray in fresh surface, fine grained. A 2cm quartz-carbonate vein is in a fracture with chalcopyrite, pyrite in it.

The rock was scanned by portable XRF three times at three distinctly different point locations. There were anomalous arsenic, copper and nickel values detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-14-1	HSG	ppm	130	0	2588	0	12800	822	179	263	3877
NER-14-2	HSG	ppm	13	-249	85	1041	1016	159	1	189	23800
NER-14-3	HSG	ppm	9	-98	81	547	517	122	27	216	29600

NER-15

Station	Date	Easting	Northing	Elevation	Rock unit
NER-15	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is greenish gray in fresh surface, fine grained with some potassium alteration. Some pinkish erythrite were seen on the surface of the sample.

The rock was scanned by portable XRF three times at three distinctly different point locations. There were anomalous silver, cobalt, arsenic and nickel values detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-15-1	HSG	ppm	80	51400	73600	0	0	42300	104	172	16000
NER-15-2	HSG	ppm	0	3232	2783	317	36	1210	10	142	103700
NER-15-3	HSG	ppm	8	2422	1438	1048	87	838	20	116	27600

NER-16

Station	Date	Easting	Northing	Elevation	Rock unit
NER-16	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is greenish gray in fresh surface, fine grained. A fault plane, characterized by strong foliation and possible slickenlines, was seen in the sample with malachite and chalcopyrite on the fault surface.

The rock was scanned by portable XRF four times at four distinctly different point locations. Anomalous silver, cobalt and base metal values were detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-16-1	HSG	ppm	256	8447	12000	0	84200	2587	2364	1271	4143
NER-16-2	HSG	ppm	121	931	1580	0	50800	659	157	486	121300
NER-16-3	HSG	ppm	0	0	53	191	558	86	44	46	756
NER-16-4	HSG	ppm	14	88	29	179	82	33	16	84	369100

NER-17

Station	Date	Easting	Northing	Elevation	Rock unit
NER-17	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is greenish gray in fresh surface, fine grained with some potassium alteration. Some pinkish erythrite were seen on the surface of the sample.

The rock was scanned by portable XRF three times at three distinctly different point locations. Anomalous silver, cobalt, arsenic and nickel values were detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-17-1	HSG	ppm	45	41300	41000	0	0	27800	98	333	9346
NER-17-2	HSG	ppm	12	2312	1296	0	232	1691	22	491	23800
NER-17-3	HSG	ppm	23	1502	292	1688	131	653	59	396	16300

NER-18

Station	Date	Easting	Northing	Elevation	Rock unit
NER-18	13-OCT-2021	601691	5250295	269	Huronian Supergroup

Coordinates in NAD83 UTM Zone 17N

Sample primarily consists of sedimentary rocks of the Huronian Supergroup, including sandstone. The sandstone is greenish gray in fresh surface, fine grained. Some rusty spots were seen on the surface of the sample.

The rock was scanned by portable XRF three times at three distinctly different point locations. There were minor anomalous silver, cobalt or base metal values detected.

Scan ID	Lithology	Units	Ag	Co	As	S	Cu	Ni	Pb	Zn	Ca
NER-18-1	HSG	ppm	13	0	789	8847	509	255	581	1633	5791
NER-18-2	HSG	ppm	0	134	16	33	37	72	75	70	16200
NER-18-3	HSG	ppm	0	80	16	123	29	101	8	112	2901

APPENDIX E – Background geochemical values for Huronian Supergroup sedimentary rocks and Nipissing Diabase

	Ag_Mean	Ag_Std	**Co_Mean**	Co_Std	**As_Mean**	As_Std	**Cu_Mean**	Cu_Std	**Ni_Mean**	Ni_Std	**Pb_Mean**	Pb_Std	**Zn_Mean**	Zn_Std
HSG	0.7	2.6	276.1	203.7	10.7	10.5	27.7	12.6	46.46667	16.7	2.7	8.8	49.9	33.1
DB	24.5	5.5	546.8	243.6	47.3	67.5	50.4	19.0	85.3	22.2	10.5	18.9	100.6	22.1

HSG – Huronian Supergroup sedimentary rocks; DB – Nipissing Diabase

The unmineralized Nipissing Diabase background values are established based on 16 pXRF analyses on unmineralized Nipissing Diabase in the Cobalt camp. The unmineralized Huronian Supergroup background values are based on 17 pXRF analyses on unmineralized Huronian Supergroup sedimentary rocks (mostly Coleman conglomerate and Lorrain sandstone).